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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,446	08/19/2003	Wolfgang Bredow	MAY-0018	4408
23413	7590	12/06/2005	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			FERGUSON, MICHAEL P	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 12/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/643,446	Applicant(s) BREDOW ET AL.	
	Examiner Michael P. Ferguson	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7 and 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7 and 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 31, 2005 has been entered.

### ***Drawings***

2. The drawings are objected to because of the following:

The cross-hatching of elements **10,20,50** and **60** in Figure 7 is improper based upon the material of such elements.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

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application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,2,4,7 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohkubo et al. (US 5,738,352) in view of Meyer et al. (US 6,709,183).

As to claims 1 and 3, Ohkubo et al. disclose a plastic joint comprising:

a selector pin **60** capable of moving around a swivel axis **Y**,

an inner, first joint element **3** being ring-shaped and an outer, second joint element **20** for mounting in a device **4A,4B**, wherein the first joint element includes a first plastic material (inherently) with axially opposite end sections **51,52**, and the second joint element includes a second material (bearing surface in ring **20**) with borings that lie within the swiveling axis, the borings forming the receptacle for the end sections of the first joint element, and

wherein the first joint element is fixed in a position on the selector in and shaped such that ring collars (annular surfaces) are formed, the second joint element bearing against the ring collars, and

wherein the second joint element is a closed ring shape (Figures 3-4B).

Ohkubo et al. fail to disclose a plastic joint comprising a second joint element including a second plastic material, a ring made of the second plastic material adjacent the first joint element and encompassing (encircling) the selector pin, a seal element comprised of a film made of thermoplastic polymer, wherein the seal element spans a common end surface of the joint elements and the ring is sealed there.

Meyer et al. teach a joint comprising a second joint element **7,8** including a second plastic material **11,12** (rubber elastomer pads **11,12**), a ring (defined by the shape of elastomer pads **11,12**) made of the second plastic material adjacent a first joint element **3,4** and encompassing (encircling) a selector pin **17** (via first joint element **3,4**), a seal element (defined by the bearing surface of elastomer pads **11,12**) comprised of a film made of thermoplastic polymer (rubber elastomer), wherein the seal element spans a common end surface of the joint elements and the ring is sealed there; the second rubber elastomer plastic pad material providing for a stronger, more durable joint by absorbing high forces perpendicular to the swiveling axis and permitting large angles of torsion around the swiveling axis (column 1 lines 39-43, Figure 10). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. to have a second joint element (bearing surface in ring **20**) including a second rubber elastomer plastic pad material as taught by Meyer et al. to provide for a stronger, more durable joint.

Ohkubo et al. in view of Meyer et al. fail to disclose a plastic joint wherein the second joint element includes longitudinal sides in which the borings are formed and

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narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element.

The applicant is reminded that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. wherein the second joint element includes longitudinal sides in which the borings are formed and narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element as such practice is a design consideration within the skill of the art.

As to claim 2, Ohkubo et al. discloses a plastic joint comprising a selector pin **60** that is equipped on a part of its circumference with profiling (key surface **61A,62A**) in which the first joint element **3** is set, the profiling comprising longitudinal grooves **61A,62A** (Figure 5).

As to claim 4, Ohkubo et al. in view of Meyer et al. fails to disclose a plastic joint wherein the first plastic material is polyoxymethylene, and the second plastic material is polypropylene.

The applicant is reminded that the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. to have a first

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plastic material comprising polyoxymethylene, and a second plastic material comprising polypropylene as such practice is a design consideration within the skill of the art.

As to claim 7, Ohkubo et al. disclose a plastic joint wherein the seal element (bearing surface in ring **20**) has a restoring function.

As to claim 9, Ohkubo et al. disclose a plastic joint comprising a third joint element **4A,4B** having a second swiveling axis **X** that lies perpendicular to the first swiveling axis **Y**, which engages in end sections **41,42** of the second joint element **20** to form a cardan joint (Figure 3).

As to claim 10, Ohkubo et al. disclose a plastic joint wherein two of the joint elements are combined to form a spherical joint element, which encompasses the selector pin **60** and is held in a retaining element **4A,4B** such that it can swivel in two planes (Figure 3).

As to claim 11, Ohkubo et al. disclose a plastic joint wherein a seal element (inherent; not shown) extends from the selector pin **60** over the retaining element **4A,4B**.

As to claim 12, Ohkubo et al. disclose the use of a plastic joint as a joint in a continuously variable switch in devices for controlling machines (Figure 3).

### ***Response to Arguments***

5. Applicant's arguments filed October 31, 2005 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

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Ohkubo et al. in view of Meyer et al. do not disclose a plastic joint *wherein the second joint element includes longitudinal sides in which the borings are formed and narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element.*

Examiner disagrees. As to claim 1, the applicant is reminded that a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify a plastic joint as disclosed by Ohkubo et al. in view of Meyer et al. wherein the second joint element includes longitudinal sides in which the borings are formed and narrow sides, the longitudinal and narrow sides being spaced apart from an outer diameter of the first joint element as such practice is a design consideration within the skill of the art.

As to claim 2, Attorney argues that:

Ohkubo et al. do not disclose a plastic joint comprising a selector pin that is equipped on a part of its circumference with profiling *comprising longitudinal grooves.*

Examiner disagrees. As to claim 2, Ohkubo et al. discloses a plastic joint comprising a selector pin **60** that is equipped on a part of its circumference with profiling comprising longitudinal grooves **61A,62A** (Figure 5).



**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Ferguson whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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